

REMARKS

Upon entry of the present Amendment, claims 1, 3, 5-13 will be pending in the application. Claim 1 has been amended. Claims 2 and 4 have been canceled without prejudice. Claims 10-13 have been added.

In the present Amendment, claim 1 has been amended to recite a silver-based inorganic antibacterial agent consisting of a silver ion-containing phosphate salt series compound. Section 112 support for this amendment may be found, for example, at page 5, lines 20-24, and page 6, lines 8-10 of the specification.

New claim 10 depends from claim 1, and recites that the silver ion-containing phosphate salt series compound is a silver-supporting zirconium phosphate. Support for claim 10 may be found, for example, at page 16, lines 21-22 of the specification.

New claim 11 depends from claim 3, and recites that the fine particulate compound is an inorganic oxide colloid particle and/or a composite oxide colloid particle. Support for claim 11 may be found, for example, at page 13, lines 9-13 of the specification.

New claim 12 depends from claim 5, and recites that the discoloration inhibitor is a combination of the imidazole series compound and the benzotriazole series compound. Support for claim 12 may be found, for example, at page 7, lines 8-25 of the specification.

New claim 13 depends from claim 8, and recites that the binder resin is an acrylic acid-based binder resin and/or a urethane-based binder resin. Support for claim 13 may be found, for example, at page 17, lines 19-23, and Example 3 of the specification.

No new matter has been added. Entry of the Amendment is respectfully requested.

I Abstract Objection

In response to the objection to the abstract, a new Abstract is submitted herewith.

Withdrawal of the objection and acceptance of the new Abstract are respectfully requested.

II. Response to Claim Rejection under 35 U.S.C. § 102

Claims 1 and 6-9 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Wong et al (U.S. Patent No. 6,306,371; “Wong”).

Claim 3 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wong in view of Pratt et al. (U.S. Patent No. 4,849,223; “Pratt”).

Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Wong in view of Niira, deceased et al. (U.S. Patent No. 4,938,955; “Niira”).

Applicants respectfully traverse the above rejections.

Claim 1, as amended, recites a silver-based inorganic antibacterial agent dispersion comprising a silver-based inorganic antibacterial agent consisting of a silver ion-containing phosphate salt series compound, a discoloration inhibitor, a thickener, a dispersant, and a dispersion medium.

Wong relates to an antiplaque oral composition comprising an effective antiplaque amount of silver zeolite. Wong discloses silver zeolite as an antibacterial agent (Col. 1, lines 39-49, Col. 2, lines 12-42, and Col. 6, lines, 3-5). However, Wong does not disclose, teach or suggest any other antibacterial agent.

Wong fails to disclose, teach or suggest a silver ion-containing phosphate salt series compound, as recited in present claim 1. Thus, the anticipation rejection based on Wong should be withdrawn for at least this reason alone.

Further, Pratt and Niira do not make up the noted deficiencies of Wong.

Pratt is relied upon by the Examiner as disclosing a silver-based inorganic antibacterial agent dispersion comprising a fine particulate compound with average particle size less than 5 microns. *See* Office Action, page 4, third paragraph. Pratt relates to an antimicrobial composition comprising metallic silver as an antimicrobial agent. Specifically, Pratt discloses silver as an antimicrobial agent which is present in the metallic form with a hydratable or hydrated oxide component formed an element selected from calcium, magnesium, niobium, silicon, tantalum, tin, titanium, zinc, aluminum, zirconium, cobalt, hafnium, lanthanum, tungsten and cerium (Col. 2, lines 42-57). Pratt discloses that the silver may be in the form of any fine morphological structure such as granules, spheroids, powder and the like, preferably deposited on the hydratable or hydrated oxide (col. 4, lines 13-16).

Pratt discloses silver as an antimicrobial agent in the metallic form with the specific hydratable or hydrated oxide component. However, Pratt does not disclose, teach or suggest a silver ion-containing phosphate salt series compound, as recited in present claim 1.

Niira is relied upon by the Examiner as disclosing a silver-based inorganic antibacterial agent resin composition comprising a discoloration inhibitor; wherein the discoloration inhibitor is a benzotriazole series compound. *See* Office Action, page 7, second paragraph. Niira discloses an antibiotic resin composition comprising an antibiotic zeolite, the ion-exchangeable ions of which are partially or completely replaced with ammonium ions and antibiotic metal ions comprising silver ions. Niira merely discloses an antibiotic zeolite with silver ions, and does not disclose or suggest any other antibacterial agent (col. 2, lines 11-61 and col. 3, lines 1-68, col. 4, lines 1-7).

Niira also does not disclose, teach or suggest a silver ion-containing phosphate salt series compound, as recited in present claim 1.

Accordingly, it is respectfully submitted that the cited references, Wong, Pratt and Niira, all fail to disclose or teach an antibacterial composition comprising a silver ion-containing phosphate salt series compound. For purpose of argument, even if Wong were combined with Pratt and/or Niira, it would not be possible for one skilled in the art to arrive the present invention. The combination of Wong with Pratt and/or Niira would at the best result an antibacterial composition comprising silver zeolite and/or metallic silver.

In addition, the present application provides a silver-based inorganic antibacterial agent dispersion that has excellent dispersibility and storage stability, and allows the silver-based inorganic antibacterial agent to fully exhibit its antibacterial performance with the silver-based inorganic antibacterial agent consisting of a silver ion-containing phosphate salt series compound.

In view of the above, Applicants respectfully submit that Wong, either alone or in view of Pratt and/or Niira, does not disclose or render obvious the presently claimed silver-based inorganic antibacterial agent dispersion. Withdrawal of the forgoing rejections under 35 U.S.C. §102 and §103(a) is respectfully requested.

III. Newly Added Claims

Newly added claims 10-13 depend, primarily or secondarily, from claim 1, and thus, are patentable for at least the reasons discussed above with respect to the patentability of independent claim 1.

IV. Conclusion

Reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be

best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



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